REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for indicating that claims 5-7 and 15-17 are allowed.

Disposition of Claims

Claims 1-20 are currently pending in this application. Claim 1 has been canceled by this reply. Thus, now claims 2-20 are pending in this application. Claims 2, 5, 8-11, 15, and 18-20 are independent. The remaining claims depend, directly or indirectly, from claims 2 and 11.

Claim Amendments

Claim 2 has been amended in the present application to be re-written in independent form including the limitations of independent claim 1 and additional limitations to clarify the present invention as recited. Claim 1 has been canceled by this reply without prejudice or disclaimer. Further, claims 8-11 and 18-20 have been amended to include the limitations of previously dependent claim 2 and the same additional amendments added to claim 2. Support for these amendments may be found in the original specification. No new subject matter is added by way of these amendments.

Rejections under 35 U.S.C. § 102

Claims 1-4, 8-14, and 18-20 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,538,764 ("Ueda"). Claim 1 has been canceled by this reply. Thus, this rejection is now moot with respect to claim 1. Claim 2 has been amended to incorporate the limitations of independent claim 1 and additional limitations to clarify the present invention as recited. Further, claims 8-11 and 18-20 have been amended to include the limitations of claim 2. To the extent that this rejection may still apply to the amended and non-amended claims, this rejection is respectfully traversed.

The claimed invention relates to a printer that dynamically prioritizes various printing tasks dependent on pre-determined events such as external interrupts, timer interrupts, etc. (*See* Specification, page 9, lines 1-6). The CPU exclusively executes a printing task for controlling a print engine, a communication task for controlling communication with a host computer, and a

language task for generating image data. Each of these tasks is controlled by a management task responsible for priority changes, scheduling, dispatches, etc. (*See* Specification, page 8, Figure 3). In order to reduce undesired variances in printing results, the relative priorities of the communication task and the language task (for generating image data based on received packet data) are altered depending on the states of a network memory (**231** in Figure 4) and a work memory (**232** in Figure 4). Specifically, the communication task enters an executable state by an interrupt, for example, and receives packet data from a host computer. The communication task subsequently removes the header section of the pack data and extracts the print job data from the packet data. In one embodiment of the invention, the packet data is stored by the communication task in network memory (231 in Figure 3), while the extracted print job data is stored in work memory (232 in Figure 3).

Further, the language task enters an executable state by receiving a print job data extraction message from the communication task. The language task subsequently generates image data according to the print request stored in work memory and writes this image data to the image data buffer (233 in Figure 3). Embodiments of the invention involve the altering of priorities of the communication and language tasks based on specific events. When a specific event occurs during the execution of a given task, the task to be executed in response to this event is altered so that its priority is relatively higher than other queued tasks (*See* Specification page 11). Accordingly, independent claims 2 and 8-11 of the present application require, in part, "...altering, on the basis of specific events, the relative priority sequence based on the priority between the communication task and the language task" and "a first memory for storing the packet data..."

In an alternative embodiment of the present invention the relative time ratios between the execution time of the communication task and the execution time of the language task are dynamically altered dependent on specific events. Accordingly, independent claims 18-20 of the present application require the altering, on the basis of specific events, the relative *time ratio* between the execution time in which an execution means is to execute the communication task and the execution time in which the execution means is to execute the language task.

With respect to the rejection of the claims, Ueda fails to disclose several limitations of amended independent claim 2. Specifically Ueda fails to disclose "...extracting print job

data...," "...exclusively executing either said communication control means, said language control means, or said print control means according to priorities assigned to each of these means," "storing the received packet data in a first memory," and "storing the print job data in a second memory." Column 25, lines 10-32, of Ueda were cited as disclosing the aforementioned limitations. However, the cited portions of Ueda, and the remainder of the reference disclose that the CPU judges whether intermediate codes corresponding to one full page of printing information can be stored in the intermediate code memory. If the capacity of the intermediate code memory is exceeded by the size of the full page of intermediate code data, the CPU *converts* the intermediate code data into dot data and stores the dot data in band memory areas (See Ueda, col. 25, ll. 10-29). Ueda is completely silent with respect to extracting print job data from packet data, executing tasks based on priority, and altering the priority of tasks based on specific events. In fact, Ueda does not mention tasks such as those described above, and fails to consider organizing tasks based on priority. Thus, it is not possible for Ueda to alter the priority of tasks based on specific events. Further, it is clear that *converting* intermediate code data into dot data is **not** the same as *extracting* print job data from received packets.

Further, the "first memory" recited in claim 2 refers to the network memory described above, which stores packet data received by the communication task. The "second memory" recited in claim 2 refers to working memory, which stores the extracted print job data that is obtained by extracting data from the received packet data stored in the network memory. Thus, the claimed invention requires, in part, the use of two different types of memory to store two different types of data. In contrast, Ueda fails to disclose or suggest the use of two different types of memory. Rather, Ueda discloses only one type of memory, *i.e.,* the intermediate code memory, which stores the intermediate codes associated with printing information, and is completely silent with respect to a second memory for storing a different type of data than the first memory.

In view of the above, it is clear that Ueda fails to disclose or suggest each and every limitation of amended independent claim 2. Dependent claims 3 and 4 are patentable for at least the same reasons. Further, independent claims 8-11, and 18-20 include similar allowable subject matter and are patentable over Ueda for at least the same reasons as discussed above with reference to claim 2. Dependent claims 12-14 are patentable for least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 04783/008001).

Dated: March 29, 2005   Respectfully submitted,
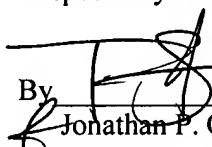
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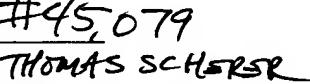
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